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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,681	07/18/2003	Juan Carlos Zuniga	I-2-0358.1US	3634
24374 7590 05/31/2007 VOLPE AND KOENIG, P.C. DEPT. ICC UNITED PLAZA, SUITE 1600 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103			EXAMINER TRAN, KHANH C	
			ART UNIT	PAPER NUMBER
			2611	
			MAIL DATE	DELIVERY MODE
			05/31/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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### **DETAILED ACTION**

1. The Amendment filed on 02/27/2007 has been entered. Claims 1-24 are pending in this Office action.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-3, 5-9 and 11-23 have been considered but are moot in view of the new ground(s) of rejection.

3. The Rejection of claims 16-20 under 35 USC 112, 2<sup>nd</sup> paragraph, has been withdrawn after Applicants amended claims.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country, or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 16-19 and 21-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Cudak et al. U.S. Patent 6,091,757.

<b>Office Action Summary</b>	<b>Application No.</b> 10/622,681	<b>Applicant(s)</b> ZUNIGA ET AL.	
	<b>Examiner</b> Khanh Tran	<b>Art Unit</b> 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-15 and 23-24 is/are allowed.
- 6) ☒ Claim(s) 16-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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Regarding claim 16, Cudak et al. teaches in FIG. 2 is an illustration of the assignment of orthogonal variable spreading factor codes in accordance with the preferred embodiment of the present invention.

From FIG. 2, the tree has rows and each successive row down the tree having double a spreading factor of the preceding row. Each row has an assigned numerical value as set forth in the application claim. In column 4 lines 20-42, the assignment utilize the assigned numerical value.

Regarding claim 17, referring back to FIG. 2, the numeric value of a lowest spreading factor (e.g. SF=8 being assigned 1) is one and the two children nodes (e.g. SF=16 being assigned 2 and 3) of each parent node are assigned a numeric value equal to twice the numeric value of that parent node or twice the numeric value of that parent node plus one.

Regarding claim 18, as recited in claim 17 rejection, the numeric value of a lowest spreading factor (e.g. SF=8 being assigned 1) is one and the two children nodes (e.g. SF=16 being assigned 2 and 3) of each parent node are assigned a numeric value equal to twice the numeric value of that parent node or twice the numeric value of that parent node plus one. Hence, a change in state (in the downward direction) of a specified code requires updating of a code that has the code numeric value of two times that of the code numeric value of the specified code and two times that of the code numeric value of the specified code plus one as claimed in the pending claim.

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Regarding claim 19, similar to claim 18 rejection, in this case, the change in state (in the upward direction) of a specified code requires updating of a code as claimed in the application claim.

Regarding claim 21, claim is rejected on the same ground as for claim 16 because of similar scope; see FIG. 2.

Regarding claim 22, as shown in FIG. 2, the lowest spreading factor is assigned and identified as code 1, respectively.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Cudak et al. U.S. Patent 6,091,757.

Regarding claim 20, Cudak et al. teachings differs with the claimed limitations in that Cudak et al. employs codes starting with spreading factor of 8 to codes ending with spreading factor of 128 as shown in FIG. 2. However, one of ordinary skill in the art at the time the invention was made would have recognized that in the case if Cudak et al.

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teachings are modified to utilize the same spreading factors as claimed, the numerical values would have been assigned the same.

***Allowable Subject Matter***

6. Claims 1-6 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 1, claim is allowable over prior art of record because the cited references cannot teach or suggest a method for reassigning codes of an orthogonal variable spreading factor (OVSF) code tree in a code division multiple access communication system as set forth in the application claim.

7. Claims 7-15 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 7, claim is allowable over prior art of record because the cited references cannot teach or suggest a radio network controller (RNC) having a radio resource management device performing the steps as set forth in the application claim.

8. Claims 23-24 are allowed.

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The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 23, claim is allowable over prior art of record because the cited references cannot teach or suggest the step of "assigning each code an indicator, the indicator having two bits, a first of the two bits indicating whether the code is blocked by use of another code and a second of the two bits indicating whether the code is blocked by one or two codes".

### **Conclusion**

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kim et al. U.S. Patent 7,164,650 B2 discloses "Method for transmitting/receiving information about orthogonal variable spreading factor codes assigned to user data in a high speed data packet access communication system".

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Tran whose telephone number is 571-272-3007. The examiner can normally be reached on Monday - Friday from 08:00 AM - 05:00 PM.

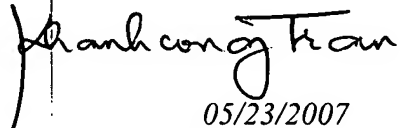
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KCT

  
05/23/2007  
Khanh Tran  
Primary Examiner, AU 2611